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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Jiangtao WEN, et al.

Docket No: Q48591

Appln. No.: 09/203,672

Group Art Unit: 2613

Confirmation No.: 4494

Examiner: Shawn An

Filed: December 1, 1998

For: METHOD FOR REPRESENTING ENCODING UPON CODING VIDEO INFORMATION

REPLY BRIEF PURSUANT TO 37 C.F.R. § 1.193(b)

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 1.193(b), Appellant respectfully submits this Reply Brief in response to the Examiner's Answer dated October 2, 2003. Entry of this Reply Brief is respectfully requested.

POINTS RAISED IN EXAMINER'S ANSWER

In the Response to Argument section of the Examiner's Answer, the Examiner refers to four arguments that he alleges Appellants have presented. The Examiner refers to these arguments, respectively, as arguments "A", "B", "C", and "D". The Examiner characterizes argument "B" as an argument that Suzuki et al does not disclose or teach generating an extended code field (COD), which includes: "indicating whether both the MV and DCT are encoded, or

whether only the MV is encoded (page 7, lines 15-18) as recited in claim 8". (Examiner's Answer, page 4, lines 8-12). At the bottom of page 4 of the Examiner's Answer, the Examiner states:

> Regarding argument B), quite opposite to COD 1, Suzuki clearly discloses that if ac components other than zero are present in the DCT coefficients of the I or Picture, the COD flag becomes zero, and the subsequent data may be transmitted (col. 33, lines 63-66). In other words, both a motion vector (MV) and a discrete code sign transform (DCT) are encoded.

Appellants submit, however, that col. 3, lines 63-66 of Suzuki et al only discloses indicating that DCT coefficients are encoded. Thus, according to this teaching, it could be that DCT coefficients are encoded, but not a motion vector (MV). Suzuki et al does not provide any teaching that the simultaneous presence of DCT coefficients and MV encoded data is indicated. That is, merely because subsequent data may be transmitted does not require that motion vector (MV) can be transmitted with the subsequent data. For example, an I picture would have no need for motion vector data.

Additionally, at the top of page 5 of the Examiner's Answer, the Examiner states:

> "Furthermore, since claim 8 recites "...MV and the DC are encoded or whether only the MV is encoded.", the latter part of only the MV is encoded does not have to be met since the MV and the DCT being encoded are met.

Assuming, *arguendo*, the correctness of the Examiner's contention that only one of the conditions need to be met, Appellants submit that neither of the conditions are met. That is, as argued above, Suzuki et al does not teach an extended field code (COD) having all of the limitations of claim 8, including indicating whether both the MV and the DCT are encoded. Also, Suzuki et al does not teach an extended code (COD) field having the limitations of claim 8

including indicating whether only the MV is encoded. Thus, Appellants submit that Suzuki et al does not teach or suggest an extended code (COD) field having the limitations of the last paragraph of claim 8.

In the Examiner's Answer, at page 5, lines 4-5, the Examiner states "furthermore, the Examiner notes that COD in claim 8 is not given much patentable weight." Whether or not the Examiner gives much patentable weight to the term COD, it is still required by claim 8 that the same extended code field includes "a bit stream indicating whether both a motion vector (MV) and a discrete cosign transform (DCT) value are not encoded, whether both the MV and the DCT are encoded, or whether only the MV is encoded." In the Examiner's Answer, at page 5, beginning at line 8, the Examiner states "furthermore, the Suzuki incorporates both the COD (Fig. 40A) and the MODB field codes (Fig. 40B) as extended code fields to meet the Appellant's extended field codes (COD) having at least two bits. However, Appellants submit that incorporating both the COD of Fig. 40A and the MODB of Fig. 40B to meet "Appellant's extended field codes is improper. Even though the Examiner's statement refers to claim 11, Appellants believe that this statement indicates improper reasoning underlying the rejection of claim 8. That is, claim 8 recites a single extended code field having the properties attributed to it in claim 8.

On the other hand, the Examiner combines the teachings of Suzuki et al regarding different field codes, having separate functions and effects, and applies this combination of different field codes as anticipating Appellants' single field code. It is improper to incorporate both the COD of Fig. 40A and the MODB of Fig. 40B to meet Appellant's single extended code

field. Therefore, even if the Examiner chooses not to give "much patentable weight" to the term COD, he still must not ignore the requirement of the claim that a single extended code field may take on the attributes described by claim 8. That is, the Examiner may not mix and match attributes of different code fields, having different purposes, to meet Appellants' claimed code field.

With respect to claim 11, which requires that COD field has specified bit values of "11", "00" and "01" to indicate respective conditions, the Examiner states, at page 5, lines 10+, "Suzuki also discloses the extended code field "00" indicating neither the MV nor the DCT values being encoded, a bit value "11" indicating both the MV and the DCT value are encoded, and a bit value "10" indicating only the MV is encoded (col. 35, lines 3-8)." Appellants submit, however, that Suzuki does not teach or suggest, at col. 35, lines 3-8, or elsewhere, an extended code field "00" indicating neither the MV nor the DCT values being coded. Suzuki et al does teach a COD being zero (according to the variable length encoding shown in Figs. 41A and 41B) under certain data transmission conditions (see col. 34, lines 41-65). Furthermore, the Examiner states, at page 5, lines 16+, "Appellants incorporate the extended field code (COD) having two bits, while Suzuki's reference have substantially the same extended field code (COD) having one bit in combination with MODB field codes as having two bits, but the results are substantially identical." The Examiner also states that he considers the claimed bit values to be a non-critical feature because it is simply a matter of choosing a label (Examiner's Answer, page 5, lines 21-22).

Appellants submit, however, that Suzuki et al do not teach using three different two-bit values to indicate three separate conditions as required by claim 11. That is, Fig. 41A shows using a one bit value of "0", a two bit value of "10" and a second two bit value of "11" to indicate different conditions. Therefore, it is not simply a matter of changing the labels for indicating the various conditions prescribed by claim 11. Rather, Suzuki et al teaches a different concept from what is claimed in claim 11. More specifically, Suzuki et al teaches using two bits to indicate two respective conditions and one bit to indicate a third respective condition. Therefore, indicating the third respective condition using one bit (i.e., "0"), is as unreliable as the one bit indications of the related art described at pages 1 and 2 of the present application.

Therefore, even if one were to assume that the Examiner is correct in ignoring the indicated bit values set forth in claim 11, the Examiner's analysis is still incorrect because each of the claimed indications are two bit indications, whereas Suzuki et al teaches two-bit indications only for two conditions.

At page 6, beginning at line 4 of the Examiner's Answer, the Examiner addresses claim 14, which requires that information is encoded by using only MV, when motion of an image is constant. The Examiner states:

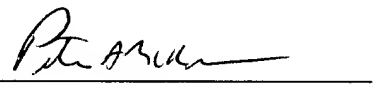
> Suzuki discloses that in a case for P-VOP, if COD flag is set to 1, it may treat the macro-block as a "P(inter)" macro-block with the MV for the whole macro-block equal to zero and with no coefficient data (col. 34, lines 10-14). In other words, there is a 0 MV, meaning it hasn't moved (motion of an image is constant), but it still is a MV, nonetheless. Therefore, the information is encoded by using only MV (in Suzuki's case, 0 MV), when motion of an image is constant, since there are no coefficient data (DCT). Therefore, the claim 14 limitation has been met.

Appellants submit, however, that Suzuki et al does not teach that a 0 MV is encoded as required by claim 14. Rather, Suzuki teaches that "no further information [including MV information] may be transmitted for the micro-block] (col. 34, lines 10-11). However, "the decoder may treat the macro-block as a 'P(inter)' macro-block with the motion vector for the whole block equal to zero and with no coefficient data (col. 34, lines 12-14)."

CONCLUSION

For the above reasons as well as the reasons set forth in Appellant's Brief on Appeal, Appellant respectfully requests that the Board reverse the Examiner's rejections of all claims on Appeal. An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,



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